AMENDMENTS TO THE CLAIMS

The text of all pending claims, including withdrawn claims, is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claim 17 without prejudice or disclaimer. Please AMEND claims 18-21 to read as follows:

1. (ORIGINAL) A method of recording record signals sequentially transmitted from a host on an optical recording medium, comprising:

receiving record data sequentially transmitted from the host and storing the received record data in a buffer if a predetermined environment for a data recording apparatus on the optical recording medium to record the received data is set;

building information on the optical recording medium using the record data to be recorded in a lead-in region of the optical recording medium among the record data stored in the buffer; and

signal-processing the record data stored in the buffer and sequentially recording the signal-processed data on the lead-in region, a program region, and a lead-out region of the optical recording medium.

2. (ORIGINAL) The method of claim 1, further comprising notifying the host, after the signal processing, that recording of the signal-processed data on the optical recording medium has been completed.

3. (ORIGINAL) The method of claim 1, wherein the information on the optical recording medium is built using one of a 16 byte-SubQ value and a 96 byte-Subcode value from among the record data received from the host depending on a block type of the record data.

4. (ORIGINAL) The method of claim 3, wherein the building comprises:

identifying the number of blocks if the 16 byte-SubQ value exists among the record data to be recorded in the lead-in region of the optical recording medium, stored in the buffer;

interpreting a SubQ value of each of the identified blocks; and

building the information on the optical recording medium using an index value in the interpreted SubQ value of each of the identified blocks.

5. (ORIGINAL) The method of claim 4, wherein the index value comprises 8 bits.

6. (ORIGINAL) The method of claim 4, wherein the index value identifies one of a first track number of an optical disk a last track number of an optical disk, and a start address of a lead-out region of an optical disk.

7. (ORIGINAL) The method of claim 3, wherein the building comprises:

identifying the number of blocks if the 96 byte-Subcode value exists among the record data to be recorded in the lead-in region of the optical recording medium, stored in the buffer;

deducing a SubQ value of each of the identified blocks from the 96 byte-Subcode value;

interpreting a Subcode value of each of the identified blocks; and

building the information on the optical recording medium using an index value in the interpreted Subcode value of each of the identified blocks.

8. (ORIGINAL) An apparatus for recording record signals sequentially transmitted from a host, comprising:

a storing section which receives and stores record data sequentially transmitted from the host; and

a control section which builds information on the optical recording medium using the record data to be recorded on a lead-in region of the optical recording medium among the record data stored in the storing section and controls the record data stored in the storing section to be sequentially recorded on the lead-in region, a program region, and a lead-out region of the optical recording medium.

9. (ORIGINAL) The apparatus of claim 8, wherein, when recording of the record data stored in the storing section onto the optical recording medium is completed, the control section transmits a record-end signal to the host.

10. (ORIGINAL) The apparatus of claim 8, wherein the control section builds the information on the optical recording medium using one of a 16 byte-SubQ value and a 96 byte-Subcode value from among the record data received from the host, depending on a block type

of the record data.

11. (ORIGINAL) The apparatus of claim 10, wherein the control section builds the information on the optical recording medium using the 16 byte-SubQ value which exists among the record data to be recorded in the lead-in region of the optical recording medium by identifying a number of blocks stored in the storing section, interpreting a SubQ value of each of the identified blocks, and using an index value in the interpreted SubQ value of each of the identified blocks.

12. (ORIGINAL) The apparatus of claim 10, wherein the control section builds the information on the optical recording medium using the 96 byte-Subcode value by identifying the number of blocks stored in the storage section, deducing a SubQ value of each of the identified blocks from the 96 byte-Subcode value, interpreting Subcode of each of the identified blocks, and using an index value in the interpreted Subcode of each of the identified blocks.

13. (ORIGINAL) The apparatus of claim 11, wherein the index value comprises 8 bits.

14. (ORIGINAL) The apparatus of claim 11, wherein the index value identifies one of a first track number of an optical disk, a last track number of an optical disk, and a start address of a bad-out region of an optical disk.

15. (ORIGINAL) The apparatus of claim 12, wherein the index value comprises 8 bits.

16. (ORIGINAL) The apparatus of claim 12, wherein the index value identifies one of a first track number of an optical disk, a last track number of an optical disk, and a start address of a bad-out region of an optical disk.

17. (CANCELLED)

18. (CURRENTLY AMENDED) ~~The apparatus of claim 17~~A recording apparatus, comprising:

a buffer section which stores data, has a storage capacity, and has a buffer mode

including a recording mode;

a recording section which records data onto a storage medium in a recording mode which includes a raw recording mode;

a table of contents (TOC) building section which builds TOC information using one of a SubQ value and a Subcode from the received data;

a control section which manages the buffer section so that the storage capacity is not exceeded, monitors the storage capacity of the buffer section, and changes the buffer mode to recording when the storage capacity is met,

wherein, when the buffer mode is set to recording, the recording section is set to the raw recording mode, and

wherein the TOC building section builds the information on the optical recording medium using a 16 byte-SubQ value which exists among the record data to be recorded in the lead-in region of the optical recording medium by identifying a number of blocks stored in the buffer section, interpreting a SubQ value of each of the identified blocks, and using an index value in the interpreted SubQ value of each of the identified blocks.

19. (CURRENTLY AMENDED) ~~The apparatus of claim 17~~A recording apparatus, comprising:

a buffer section which stores data, has a storage capacity, and has a buffer mode including a recording mode;

a recording section which records data onto a storage medium in a recording mode which includes a raw recording mode;

a table of contents (TOC) building section which builds TOC information using one of a SubQ value and a Subcode from the received data;

a control section which manages the buffer section so that the storage capacity is not exceeded, monitors the storage capacity of the buffer section, and changes the buffer mode to recording when the storage capacity is met,

wherein, when the buffer mode is set to recording, the recording section is set to the raw recording mode, and

wherein the TOC building section builds the information on the optical recording medium using a 96 byte-Subcode value by identifying the number of blocks stored in the buffer section, deducing a SubQ value of each of the identified blocks from the 96 byte-Subcode value, interpreting Subcode of each of the identified blocks, and using an index value in the interpreted Subcode of each of the identified blocks.

20. (CURRENTLY AMENDED) A data recording method comprising:

processing a record command;

forming an appropriate recording power and setting an appropriate recording speed;

initializing an encoder;

receiving data from a host and managing a buffer;

setting an encoder mode and starting sector processing;

building information using one of a SubQ value and a Subcode value of the received data;

setting recording parameters and moving an optical pickup over a desired location of an optical medium;

recording the received data from a lead-in region to a lead-out region; and

notifying the host of completion of data recording,

wherein the TOC building section builds the information on the optical recording medium using either

a 16 byte-SubQ value which exists among the received data by identifying a number of blocks stored in the buffer, interpreting a SubQ value of each of the identified blocks, and using an index value in the interpreted SubQ value of each of the identified blocks, or

a 96 byte-Subcode value by identifying the number of blocks stored in the buffer, deducing a SubQ value of each of the identified blocks from the 96 byte-Subcode value, interpreting Subcode of each of the identified blocks, and using an index value in the interpreted Subcode of each of the identified blocks.

21. (CURRENTLY AMENDED) A data recording method comprising:

processing a record command;

forming an appropriate power and setting an appropriate recording speed;

initializing an encoder receiving data from a host;

setting a buffer to a raw recording mode;

building table of contents information for the received data; and

recording the received data on ~~the~~ an optical medium after the building.